



THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

Date Distributed:

NATIONAL BOARD INSPECTION CODE FRP TASK GROUP

MINUTES

Meeting of April 29th, 2024
Virtual via MS Teams

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The National Board of Boiler & Pressure Vessel Inspectors
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1. Call to Order

The meeting was called to order at 1:33 p.m. Eastern Time.

2. Introduction of Members and Visitors

The following members of the Task Group were present for the meeting:

- Ms. Debra McCauley, Chair
- Mr. Jonathan Ellis, Secretary
- Mr. Mike Gorman
- Mr. Allen Beckwith
- Mr. Norman Newhouse
- Mr. Juan Bustillos
- Mr. Jess Richter
- Mr. Bernie Shelley
- Mr. Francis Brown
- Mr. Doug Eisberg
- Mr. John Eihusen

Miranda Bradshaw and Avery Boyer were also in attendance as visitors.

Enough members were present to establish a quorum for the meeting.

3. Announcements

Ms. McCauley announced that the National Board is seeking a representative from the FRP Task Group to act as an editorial reviewer for any editorial changes that National Board staff would like to propose for FRP sections in the NBIC. She stated that anyone interested in volunteering should contact Mr. Ellis.

4. Adoption of the Agenda

Mr. Beckwith requested that a discussion item on RTP-1 be added to the agenda. A motion was made, seconded, and unanimously approved to adopt the agenda with the inclusion of Mr. Beckwith's discussion item.

5. Approval of the Minutes of October 2023 Meeting

The minutes can be found on the National Board website:

<https://www.nationalboard.org/Index.aspx?pageID=13&ID=18>

Ms. McCauley requested that the October minutes be amended to include Mr. Geoff Clarkson's presentation. Mr. Ellis stated that he will attach the presentation to the minutes and upload the new copy to the National Board website. A motion was made, seconded, and unanimously approved to accept the amended minutes.

6. Review of Rosters

- a. Membership Nominations
 - i. None.
- b. Membership Reappointments
 - i. None.
- c. Officer nominations
 - i. None.

7. Action Items

| | | |
|---|------------------------------|----------------------|
| Item Number: NB16-1402 | NBIC Location: Part 2 | No Attachment |
| General Description: Life extension for high pressure vessels above 20 years | | |
| Subgroup: FRP | | |
| Task Group: M. Gorman (PM), N. Newhouse, J. Eihusen | | |
| April 2024 Meeting Action: Mr. Gorman presented the latest version of the proposal. The proposal will be sent out to the group for comments. Additional discussion was held on the formatting of the form shown in the proposal. | | |

8. Additional Business

- Mr. Eisberg stated that progress is being made on a guideline dealing with safety in membrane systems technologies, how to repair leaks, and how to identify problems with those vessels.
- Mr. Ellis informed the group that National Board staff has reviewed NBIC Part 3, Supplement 4 and identified potential editorial changes that could be made to the supplement. With the Task Group’s approval, National Board staff will note these changes for the 2025 edition of the NBIC.
 - Part 3, S4.16.4 a) 2) – The group determined that the liner may need to exceed the original thickness, and therefore the requirement may need to be changed. It was clarified that this is talking about routine repairs, but there may be a need to increase that limit anyway or add clarification. The group wants to discuss this further to determine if a code change is needed.
- Repairs and Alterations to an RTP-1 vessel
 - Mr. Beckwith stated that an RTP-1 vessel does not have to be R-stamped if repaired, but there is a request for that. Is this something that could be done?
 - A question was asked on when RTP-1 became exempt from the R-stamp. RTP-1 vessels don’t need to be registered with National Board, but R-stamp repairs still apply.
 - It was noted that jurisdictions mandate repairs to the R-stamp. And an R-stamp repair is best practice, even if a jurisdiction doesn’t mandate that.
 - During discussion, it was pointed out that a change could be made to Part 3, S4.18.2.5 b) to require pressure test in accordance with the original code of construction.

9. Future Meetings

July 15th – 18th, 2024 – NBIC Committee meeting in Louisville, KY
October 2024 – Task Group FRP meeting

10. Adjournment

Ms. McCauley adjourned the meeting at 3:22 p.m.

Respectfully submitted,
Jonathan Ellis
Secretary

FRP editorial

Part 3

S4.2 QUALIFICATIONS FOR "R" CERTIFICATE HOLDER DESIGNEE

The "R" ~~Stamp Certificate~~ Holder shall designate an employee who will have the responsibility of verifying the repair and ~~for~~ alteration activity meets the requirements of the NBIC. The designee shall have the following qualifications:

S4.16.4 ROUTINE REPAIRS

Prior to performing routine repairs, the Certificate Holder should determine that routine repairs are acceptable to the ~~Jurisdiction-jurisdiction~~ where the work is to be performed.

- a) Acceptable routine repairs are listed below:
 - 1) The addition or repair of non-load bearing attachments to pressure-retaining items where post curing is not required.
 - 2) Replacement and repair of damaged corrosion liner areas in shells and heads shall not exceed 100 ~~sq-~~in.² (65 ~~sq-~~cm²) and shall not exceed the original corrosion liner thickness.
- b) Routine repairs may be performed under the Certificate Holder's ~~quality~~ Quality Management System (QMS) ~~program~~; however, the requirement for in-process involvement of the Inspector and stamping are waived. (See NBIC Part 3, Section 5.)
- c) The process of controlling and implementing routine repairs shall be documented in the Certificate Holder's ~~quality system program QMS~~.
- d) Routine repairs shall be documented on ~~an~~ NB-66, Form R-1, Report of Repair with a statement on line 10, Remarks: "Routine Repair."

Commented [MV1]: This change in accordance with the new rewrite of ASME QAI that has all instances of "quality system/program" etc., changed to Quality Management System (QMS)

S4.17.5 RE-RATING

- a) Re-rating of a pressure-retaining item by increasing the maximum allowable working pressure (internal or external) or temperature, or by decreasing the minimum temperature, shall be done only after the following requirements have been met to the satisfaction of the ~~J~~jurisdiction at the location of the installation:

- 1) Revised calculations verifying the new service conditions shall be prepared in accordance with the Certificate Holder's ~~Quality Control System~~ QMS. Re-rating calculations for ASME BPV Code Section X and ASME RTP-1 vessels shall be performed by a Professional Engineer experienced in the design of reinforced plastic pressure vessels;
 - 2) All re-rating shall be established in accordance with the requirements of the construction standard to which the pressure-retaining item was built;
 - 3) Current inspection records shall verify that the pressure-retaining item is satisfactory for the proposed service conditions; and
 - 4) The pressure-retaining item shall be pressure tested, as required, for the new service conditions.
- b) ~~This code~~ The NBIC does not provide rules for de-rating pressure-retaining items; however, when the MAWP and/ or allowable temperature of a pressure-retaining item is reduced, the jurisdiction, if applicable, where the object is installed shall be contacted to determine if specific procedures should be followed.

Commented [MV2]: Unless a different code is being specified?

S4.17.6 PRESSURE TESTING

Except as permitted in g) below, the following requirements apply for pressure testing of alterations to pressure-retaining items:

- a) When the alteration activity involves the installation of a replacement part and/ or the alteration will impact the design pressure, the design temperature, or the design rated capacity, a pressure test, as required by the original code of construction, shall be conducted. An acoustic emission test is also required if the original vessel was so tested, unless a nozzle whose diameter is one-tenth the vessel diameter or less is being added.